Water Wise Landscape

Did you know that the City of Brentwood offers free services to help you save water while enjoying lush landscape? It is possible to cultivate eye-catching and healthy landscapes in the hot and dry climate of Brentwood. Visit the City's web site for more information about water conservation, landscape water tips, and drought tolerant plants.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

An assessment of the drinking water sources for the Brentwood Water System was completed in 2002. A copy of the assessment is available by contacting the City offices at (925) 516-5400. The sources are considered most vulnerable to the following activities not associated with any detected contaminants: gas stations and septic systems.

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ECRWSS

Postal Customer

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

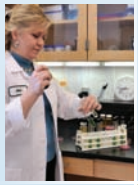
PWS ID #0710004

City of Brentwood
www.ci.brentwood.ca.us
2201 Elkins Way
Brentwood, CA 94513

ANNUAL

WATER QUALITY REPORT

Water Testing Performed in 2009



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PUBLIC WORKS DEPARTMENT

Where Does My Water Come From?

The City of Brentwood utilizes ground water and surface water for its fresh water sources. The ground water is pumped from the City's operations of seven groundwater wells. Surface water originates from rivers within the Sierra Mountain Range; the water flows into the Sacramento - San Joaquin Delta. The surface water is treated at the City of Brentwood's Water Treatment Plant and/or Contra Costa Water District's Randall-Bold Water Treatment Plant. Brentwood water customers receive a blend of surface and ground water from these sources.

In 2009, the City of Brentwood delivered water to over 16,500 connections; City wells supplied 1.2 billion gallons, while the City received 2.43 billion gallons of treated surface water.

The City of Brentwood's distribution system consists of six water reservoirs with a total storage capacity of 18.8 million gallons, three pressure zones, and six water booster pump stations located within the city limits.

The Brentwood Wastewater Treatment Plant supplied 22 million gallons of recycled water to City parkways and medians for irrigation. An additional 472 million gallons of non-potable water from the Delta was used to irrigate golf courses and medians. Using recycled and untreated water is one of the many ways that Brentwood is able to conserve water and use it wisely.

Educational Information

- The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.
- ***Contaminants that may be present in source water include:***
  - ***Microbial contaminants***, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

  - ***Inorganic contaminants***, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
  - ***Pesticides and herbicides*** that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
  - ***Organic chemical contaminants***, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
  - ***Radioactive contaminants*** that can be naturally-occurring or be the result of oil and gas production and mining activities.
  - In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Although the lead detected in your drinking water is below the Action Level, the City of Brentwood is required to inform you that:

  - If present, ***elevated levels of lead*** can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Brentwood is responsible for providing high quality drinking water, but cannot control the variety of materials used in household plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Regulated Substances				City of Brentwood Ground Water (Wells)		City of Brentwood Surface Water		Randall-Bold Surface Water			
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	PHG (MCLG) [MRDLG]	Average	Range Low–High	Average	Range Low–High	Average	Range Low–High	Violation	Typical Source
Arsenic (ppb)	2009	10	0.004	ND	ND - 4	n/a	ND	n/a	ND	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Aluminum (ppm)	2009	1	0.6	ND	ND - 0.093	n/a	ND	n/a	ND	No	Erosion of natural deposits; residue from some surface water treatment processes
Chloramines (ppm)	2009	[4.0 (as Cl_2)]	[4.0 (as Cl_2)]	1.62	1.11 - 2.06	n/a	n/a	n/a	n/a	No	Drinking water disinfectant added for treatment
Chromium (ppb)	2009	50	(100)	ND	4.4 - 12	n/a	ND	n/a	ND	No	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride (ppm)	2009	2.0	1	0.27	0.14 - 0.35	n/a	n/a	0.76	0.61 - 0.91	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2009	15	(0)	6.0	ND - 8.5	n/a	n/a	n/a	n/a	No	Erosion of natural deposits
Gross Beta Particle Activity (pCi/L)	2009	50	(0)	ND	ND - 4.7	n/a	n/a	n/a	n/a	No	Decay of natural and man-made deposits
Haloacetic Acids (ppb)	2009	60	n/a	5.7	ND - 19.2	n/a	n/a	n/a	n/a	No	Byproduct of drinking water disinfection
Nitrate [as nitrate] (ppm)	2009	45	45	13	4.3 – 20	ND	ND - 2.4	ND	ND - 5.0	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ppb)	2009	50	50	7.47	ND -18	n/a	ND	n/a	ND	No	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
TTHMs (Total Trihalomethanes) (ppb)	2009	80	n/a	32.9	ND - 58.9	n/a	n/a	n/a	n/a	No	By-product of drinking water disinfection
Secondary Substances											
There are no PHGs, MCLGs, or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetics.											
Aluminum (ppb)	2009	200	n/a	ND	ND - 93	n/a	ND	n/a	ND	No	Erosion of natural deposits; residue from some surface water treatment processes
Chloride (ppm)	2009	500	NS	152	83 - 210	78	30 - 113	73	34 - 104	No	Runoff/leaching from natural deposits; seawater influence
Corrosivity (units)	2009	Non-corrosive	NS	n/a	n/a	-0.16 to +0.54	+0.17	-0.71 to +0.79	+0.31	No	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Specific Conductance (uS/cm)	2009	1600	NS	1300	810 - 1600	530	310 - 680	490	300 - 620	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2009	500	NS	200	100 - 310	58	40 - 101	49	33 - 62	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2009	1000	NS	796	460 - 1300	n/a	n/a	n/a	n/a	No	Runoff/leaching from natural deposits

Regulated Substances				City of Brentwood Ground Water (Wells)		City of Brentwood Surface Water		Randall-Bold Surface Water			
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	PHG (MCLG) [MRDLG]	Average	Range Low–High	Lowest monthly % of samples that meet requirements	Maximum effluent value	Lowest monthly % of samples that meet requirements	Maximum effluent value	Violation	Typical Source
Turbidity Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.	2009	TT=1 NTU TT=95% of samples ≤ 0.3 NTU	n/a			100%	0.09	98%	0.54	No	Soil Runoff
		5 NTU		0.2	0.1 - 0.3						

Substance (Unit of Measure)	Year Sampled	Action Level	PHG (MCLG)	Amount Detected (90th%tile)	Sites Above Action Level	Violation	Typical Source
Copper (ppm)	2009	1.3	0.3	0.14	None	No	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2009	15	0.2	ND	None	No	Internal corrosion of household plumbing systems; discharge from industrial manufacturers: erosion of natural deposits

Lead and Copper: 30 sites sampled.

Unregulated Substance		City of Brentwood Ground Water (Wells)		City of Brentwood Surface Water		Randall-Bold Surface Water	
Substance (Unit of Measure)	Year Sampled	Average	Range Low–High	Average	Range Low–High	Average	Range Low–High
Alkalinity (ppm)	2009	211	180 - 270	72	49 - 92	71	49 - 95
Ammonia (ppm)	2009	n/a	n/a	n/a	0.44	n/a	0.29
Bromide (ppm)	2009	n/a	n/a	0.12	ND - 0.29	0.12	ND - 0.30
Calcium (ppm)	2009	72	50 - 100	20	13 - 27	20	12 - 29
Hardness (ppm) Hardness is the sum of positive ions present in the water, generally magnesium and calcium. The cations are usually naturally occurring.	2009	314	190 - 450	118	94 -138	113	88 - 148
Hardness in grains	2009	18.4	11.1 - 26.3	6.9	5.5 - 8.1	6.6	5.2 - 8.7
Magnesium (ppm)	2009	37	17 - 64	12.9	8.0 - 17.6	12	7.7 - 14.2
pH (units)	2009	7.9	7.9 - 8.0	8.4	8.1 - 8.6	8.4	8.1 - 8.7
Potassium (ppm)	2009	3.2	2.7 - 3.7	3.2	1.8 - 4.3	3.2	1.8 - 4.5
Sodium (ppm) Sodium refers to the salt present in the water and is generally naturally occurring.	2009	139	84 - 180	62	35 - 79	58	37 - 76

Sampling Results
The City of Brentwood is pleased to report that during 2009 the water delivered to your home or business complied with, or did better than, all state and federal drinking water requirements. For your information, the tables above have been compiled to show what substances were detected in Brentwood's drinking water during 2009. Although all of the substances listed here are under the Maximum Contaminant Level (MCL), City staff feels it is important that you know exactly what was detected and how much of the substance was present in the water.

Consumers who would like more information on water quality should contact Jaci Parsons, Regulatory Compliance Supervisor, at (925) 516-6060.

Community Participation
The City Council meets at 7 p.m. on the second and fourth Tuesday of each month at the City Council Chambers.

Definitions, Acronyms, and Units

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Regulatory Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

n/a: Not applicable

ND (Not Detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).